### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau





### (43) International Publication Date 1 December 2005 (01.12.2005)

# (10) International Publication Number WO 2005/114870 A1

(51) International Patent Classification7:

H04B 7/15

(21) International Application Number:

PCT/US2005/016748

(22) International Filing Date:

11 May 2005 (11.05.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/570,081 60/570,082 12 May 2004 (12.05.2004) US 12 May 2004 (12.05.2004) US

60/570,067

US 12 May 2004 (12.05.2004)

(71) Applicant (for all designated States except US): AN-

DREW CORPORATION [US/US]; 19700 Janelia Farm Boulevard, Ashburn, VA (US).

(72) Inventors; and

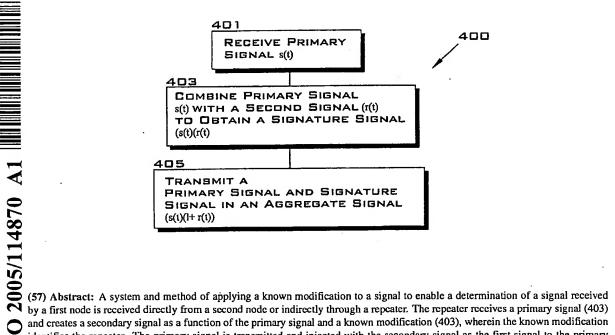
(75) Inventors/Applicants (for US only): ALLES, Martin [US/US]; 2421 Williams Avenue, Vienna, VA 22180 (US).

KENNEDY, Joseph, P., Jr. [US/US]; 11127 Elmview Place, Herndon, VA 22066 (US). CARLSON, John, Peter [US/US]; 12006 Trossack Road, Herndon, VA (US).

- (74) Agent: COMTOIS, Mark, C.; Suite 700, 1667 K Street, N.W., Washington, DC 20006 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR IDENTIFYING THE PATH OR DEVICES ON THE PATH OF A COMMUNICATION SIGNAL USING (1+r(T)) AMPLITUDE MODULATION



and creates a secondary signal as a function of the primary signal and a known modification (403), wherein the known modification identifies the repeater. The primary signal is transmitted and injected with the secondary signal as the first signal to the primary receiver (405).



# WO 2005/114870 A1



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, For two-letter codes and other abbreviations, refer to the "Guid-GQ, GW, ML, MR, NE, SN, TD, TG).

ance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of